

REMARKS

Upon entry of the present amendments, Claims 2, 6, 8, 15, 22, 24-26, 28, 30-45 are pending in the application. Claims 2, 26, 41 and 43 are amended for clarity. Claim 40 is amended to stand as an independent claim. Claim 45 is added to expedite prosecution. Support for the amendments to Claim 40 and new Claim 45 are found for example at page 9, line 27 to page 10, line 17.

No new matter is introduced by way of these amendments and the Examiner is respectfully requested to enter them.

A. 35 U.S.C. § 112 Rejection

Claims 2, 6, 8, 15, 22, 24-26, 28 and 30-44 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner's position is based on the proposition that "sustained" is a relative term that is not defined in the specification. Applicants respectfully traverse.

MPEP § 2173.02 states:

Definiteness of claim language must be analyzed, not in a vacuum, but in light of:

- (A) The content of the particular application disclosure;
- (B) The teachings of the prior art; and
- (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

In view of these requirements, Applicants respectfully point out that the specification, at page 7, lines 7-16, describes embodiments of the claimed methods of providing plants with long term resistance to pathogenic microorganisms using aromatic aldehydes in the absence of an antioxidant. One embodiment of a method of assessing resistance to pathological microorganisms is disclosed in the specification at page 16, line 14 to page 17, line 11. A working example of an embodiment of the claimed methods of sustained resistance is provided in the specification at page 37, lines 24-28. The specification, at page 7, line 11, references U.S. Patent No. 4,978,686 (Sotome) which states, at Column 1, line 13, that antioxidants are required to maintain the antimicrobial effect of the aromatic aldehyde, cinnamic aldehyde. The specification states, at page 7, lines 7-16, that it provides an advantage because antioxidants are not required to provide long term resistance. Therefore,

in view of the specification, Applicants respectfully assert that a person of ordinary skill in the art would interpret sustained resistance to mean at least as long as the resistance provided in the presence of an antioxidant.

In view of these remarks, Applicants respectfully assert Claims 2, 6, 8, 15, 22, 24-26, 28 and 30-44 are not indefinite and respectfully request the rejection be withdrawn.

B. Nonstatutory Double Patenting Rejections

1. Claims 2, 6, 8, 15, 22, 24, 26-28, 31-34 and 41-44 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-37 of U.S. Patent No. 5,639,794 in view of Sotome (U.S. Patent No. 4,978,686) and Tsuei *et al.* (U.S. Patent No. 5,589,194).

Applicants defer responding to the double patenting rejection until there is an indication of otherwise allowable subject matter.

2. Claims 43 and 44 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-10 of U.S. Patent No. 5,676,958 in view of Sotome (U.S. Patent No. 4,978,686) and Tsuei *et al.* (U.S. Patent No. 5,589,194).

Applicants defer responding to the double patenting rejection until there is an indication of otherwise allowable subject matter.

3. Claims 2, 6, 8, 15, 22, 24, 26-28, 31-34 and 40-44 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-2 and 7-12 of U.S. Patent No. 5,839,224 in view of Sotome (U.S. Patent No. 4,978,686) and Tsuei *et al.* (U.S. Patent No. 5,589,194).

Applicants defer responding to the double patenting rejection until there is an indication of otherwise allowable subject matter.

4. Claims 2, 6-8, 15, 25-28 and 30-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-16 of U.S. Patent No. 6,251,951

Applicants defer responding to the double patenting rejection until there is an indication of otherwise allowable subject matter.

C. 35 U.S.C. § 102 Rejection

Claims 2, 6, 15, 22, 24, 26, 31, 38 and 39 are rejected under 35 U.S.C. § 102(b) as being unpatentable over Saotome *et al.* (JP 57120501).

In view of the amendments to Claims 2, 26 and 41, Applicants respectfully request the rejection be withdrawn.

D. 35 U.S.C. § 103 Rejections

1. Claims 2, 6-8, 15, 22-32, 36, 38, 39 and 41-44 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sotome (U.S. Patent No. 4,978,686) in view of Tsuei *et al.* (U.S. Patent No. 5,589,194), Yamashita (U.S. Patent No. 5,696,094) and Frear (IDS C5), in further view of Saotome (JP 57120501).

To reject a claim under § 103(a), the Examiner must “present a line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.” (M.P.E.P. § 2142 (citing *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. Appl. & Inter. 1985)). This requires the rationale for the rejection to meet the three basic criteria set forth in M.P.E.P. § 2143:

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant’s disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

When construing a prior art reference,

[the] reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). . . .

(M.P.E.P. § 2141.03). “The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.” (M.P.E.P. § 2142).

Regarding the requirement that the prior art must teach or suggest all of the claim limitations, Applicants respectfully assert that the art cited in the rejection at least do not teach or suggest “sustained resistance”, “nonphytotoxic composition”, and “free of antioxidants” as defined in the specification and recited in independent Claims 2, 26, 41 and 43. Therefore, the rationale for the rejection has not met at least one requirement to factually support a *prima facie* case of obviousness.

Regarding the requirement that a prior art reference be considered in its entirety, including portions that lead away from the claimed invention, Applicants respectfully assert that the rationale for maintaining the rejection has not addressed Applicants’ position that Tseui *et al.* teach away from the claimed invention by teaching the microencapsulation of antioxidants, *e.g.*, Vitamin C and β -carotene at Column 4, lines 13-14. Tseui *et al.* does disclose the microencapsulation of active components (Column 2, line 66). However, Tseui *et al.* include antioxidants within the definition of active components (Column 4, lines 7-14). Therefore, Tseui *et al.* teach microencapsulation of antioxidants and not microencapsulation as a substitute for an antioxidant. The rationale for the rejection has not met the requirement that a teaching or suggestion to make a claimed combination must be found in the prior art. (M.P.E.P. § 2143). Because this requirement has not been met, Applicants respectfully submit the Examiner is using hindsight analysis which is an improper basis for rejection. (M.P.E.P. § 2145 X.A).

In view of these remarks, Applicants respectfully submit the references alone or in combination do not fulfill the requirements for establishing a *prima facie* case of obviousness and request the rejection of Claims 2, 6-8, 15, 22-32, 36, 38, 39 and 41-44 be withdrawn.

2. Claims 33-34 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sotome (U.S. Patent No. 4,978,686) in view of Tsuei *et al.* (U.S. Patent No. 5,589,194), Yamashita (U.S. Patent No. 5,696,094), Frear (IDS C5), Saotome (JP 57120501), and in further view of Winston (U.S. Patent No. 5,415,877). Applicants respectfully traverse the rejection.

Applicants respectfully assert for the reasons set forth above that Sotome, Tsuei *et al.*, Yamashita, Frear, and Saotome either alone or in combination do not support a *prima facie* case of obviousness. Furthermore, Tseui *et al.* teach away from the claimed invention. Winston, which discloses a fungicide formulation comprising sodium bicarbonate,

does not cure the defects of these references. Thus, for the reasons set forth above, the rationale for the rejection does not support a *prima facie* case of obviousness and Applicants respectfully request the rejection be withdrawn.

3. Claims 35 and 37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sotome (U.S. Patent No. 4,978,686) in view of Tsuei *et al.* (U.S. Patent No. 5,589,194), Yamashita (U.S. Patent No. 5,696,094), Frear (IDS C5), Saotome (JP 57120501), and in further view of Keen *et al.* (CAPLUS Abstract, AN 1979:471805). Applicants respectfully traverse the rejection.

Applicants respectfully assert for the reasons set forth above that Sotome, Tsuei *et al.*, Yamashita, Frear, and Saotome either alone or in combination do not support a *prima facie* case of obviousness. Furthermore, Tseui *et al.* teach away from the claimed invention. Keen *et al.*, which disclose the isolation of coniferyl aldehyde from facilitated diffusates of flax leaves, does not cure the defects of these references. Thus, for the reasons set forth above, the rationale for the rejection does not support a *prima facie* case of obviousness and Applicants respectfully request the rejection be withdrawn.

CONCLUSION

Applicants respectfully submit, the claims are now in condition for allowance and an early notification of such is solicited. If, upon review, the Examiner feels there are additional outstanding issues, the Examiner is invited to call the undersigned attorney at (415) 781-1989.

Respectfully submitted,

DORSEY & WHITNEY LLP

Dated:

July 20, 2004

By:


Diane J. Mason, Reg No. 43,777
Filed under 37 C.F.R. § 1.34(a)

Four Embarcadero Center, Suite 3400
San Francisco, California 94111-4187
Telephone: (415) 781-1989
Facsimile: (415) 398-3249